10

28

24

CALL CENTER
MANAGEMENT
SYSTEM — 26

12 TELEPHONY/
COMMUNICATIONS
SYSTEM(S)
(E.G., PBX, ACD, IVR,
DIALER, WEB SERVER) — 14

HOST
SYSTEM

16

INTERNET

20

22

18

FIG. 1
(PRIOR ART)

FIG. 2

202 — DEFINE RESOURCE
DATA

204 — OPEN AND DISPLAY
RELATIONSHIP
MANAGER INTERFACE

206 — OPEN A NEW OR EXISTING
RELATIONSHIP PROFILE

208 — RECEIVE A USER SELECTION
OF A RESOURCE
FUNCTIONAL CATEGORY

210 — DISPLAY AVAILABLE
RESOURCES WITHIN
THE SELECTED RESOURCE
FUNCTIONAL CATEGORY

212 — RECEIVE A USER SELECTION
OF A RESOURCE WITHIN
THE SELECTED CATEGORY

214 — ASSIGN USER-SELECTED
RESOURCE TO THE
RELATIONSHIP PROFILE

216 — ANOTHER
RESOURCE
?
YES
NO

218 — ANOTHER
RESOURCE
?
YES
NO

220 — SAVE THE RELATIONSHIP
PROFILE

222 — CREATE A RELATIONSHIP
KEY FIELD CORRESPONDING
TO THE SAVED
RELATIONSHIP PROFILE

224 — CLOSE RELATIONSHIP
MANAGER

FIG. 3

```
┌─────────────────────────┐
│      DEFINE GENERIC      │──242
│   ACTION DETAIL DATA     │
└─────────────────────────┘
            │
            ▼
┌─────────────────────────┐
│      OPEN AND DISPLAY    │──244
│  ACTION BUILDER INTERFACE│
└─────────────────────────┘
            │
            ▼
┌─────────────────────────┐
│  RECEIVE A USER SELECTION│──246
│     OF AN ACTION TYPE    │
└─────────────────────────┘
            │
            ▼
┌─────────────────────────┐
│   DISPLAY GENERIC ACTION │──248
│     DETAIL DATA FOR THE  │
│     SELECTED ACTION TYPE │
└─────────────────────────┘
            │
            ▼
┌─────────────────────────┐
│   RECEIVE USER-DEFINED   │──250
│     ACTION DETAIL DATA   │
│    AND ADD TO GENERIC    │
│     ACTION DETAIL DATA   │
│  TO CREATE A CUSTOMIZED  │
│     AVAILABLE ACTION     │
└─────────────────────────┘
            │
            ▼
┌─────────────────────────┐
│    SAVE THE CUSTOMIZED   │──252
│      AVAILABLE ACTION    │
└─────────────────────────┘
            │
            ▼
          ╱254
        ╱   ╲
YES   ╱ CREATE╲
◄────╱ ANOTHER ╲
      ╲   ?    ╱
        ╲   ╱
          ╲╱
            │ NO
            ▼
┌─────────────────────────┐
│   CLOSE ACTION BUILDER   │──256
└─────────────────────────┘
```

FIG. 4

DEFINE GOAL
DATA   ⌐262

OPEN AND DISPLAY
STRATEGY MANAGER
INTERFACE   ⌐264

OPEN A NEW OR EXISTING
STRATEGY PROFILE   ⌐266

RECEIVE A USER SELECTION
OF A GOAL CATEGORY   ⌐268

RECEIVE A USER SELECTION
OF A GOAL WITHIN THE
SELECTED GOAL CATEGORY   ⌐270

RECEIVE AT LEAST ONE
USER-DEFINED STRATEGY
THRESHOLD FOR THE
SELECTED GOAL   ⌐272

RECEIVE A USER SELECTION
OF AT LEAST ONE AVAILABLE
ACTION TO OCCUR WHEN
EACH USER-DEFINED
THRESHOLD IS REACHED   ⌐274

SAVING THE THRESHOLD(S)
AND SELECTED ACTION(S)
AS AVAILABLE GOALS WITHIN
THE STRATEGY PROFILE   ⌐276

                    ⌐278
YES   CREATE   NO   CLOSE STRATEGY   ⌐280
         ANOTHER   MANAGER
         ?

FIG. 5

COLLECT CALL CENTER
STATISTICS DATA ⟋302

OPEN AND DISPLAY
STATISTICS INTERFACE ⟋304

PRESENT STATISTICS
DISPLAY OPTIONS
CORRESPONDING TO
RELATIONSHIP PROFILES ⟋306

DISPLAY STATISTICS DATA
PERTAINING TO RESOURCES
IN THE RELATIONSHIP PROFILE
CORRESPONDING TO A USER-
SELECTED DISPLAY OPTION ⟋308

PRESENT VIEWING OPTIONS
CORRESPONDING TO THE
TYPE OF STATISTICS
TO BE DISPLAYED ⟋310

DISPLAY THE TYPE OF STATISTICS
DATA CORRESPONDING TO A
USER-SELECTED VIEWING OPTION ⟋312

PRESENT VIEW FORMATS
CORRESPONDING TO THE
LEVEL OF DETAIL AND FORMAT
OF THE STATISTICS ⟋314

DISPLAY THE STATISTICS
DATA IN A USER-SELECTED
VIEW FORMAT ⟋316

FIG. 6

320

COMPARE STATISTICS
DISPLAYED IN THE
STATISTICS
INTERFACE TO GOALS

322

HAS A
USER-DEFINED
THRESHOLD BEEN
MET
?

YES

NO

324

PROVIDE INDICATION
IN A REGION OF THE
STATISTICS INTERFACE
CONTAINING THE
STATISTICS THAT DO NOT
MEET THE THRESHOLD

FIG. 7

70

```
┌─────────────────────────────────────────────────────────────────────────┐
│ ▢ System Name: Cedar Rapids, IA - 1                              ▢▢⊡☒    │
├─────────────────────────────────────────────────────────────────────────┤
│                    Relationship Management                                │
│                                                                           │
│ ┌Relationship Profiles────────┐  ┌Add Relationship Profile───────────75  │
│ │ Credit Card Relationship    │  Profile Name │P    B      Relationship│  │
│ │ P    B      Relationship  74│                                          │
│ │ Sales Relationship          │  Description │These are the business     │
│ │ Technical Support Relationship│           │relationships between the   │
│ │                             │            │various call center         │
│ │ ┌────┐ ┌──────┐ ┌─────────┐ │            │objective Davox is managing │
│ │ │New │ │Delete│ │Duplicate│ │  ┌────┐ ┌──────┐                        │
│ │ └────┘ └──────┘ └─────────┘ │  │Save│ │Cancel│                        │
│ ├Available Relationships──────┤  └────┘ └──────┘                        │
│ │ Current Profile             │  ┌Relationship Assignments─────────────  │
│ │ ┌─────────────────────────┐ │  │Inbound DNIS                      ▽ │  │
│ │ └─────────────────────────┘ │  │Inbound DNIS                        │  │
│ │ ┌────────────────────────▽┐ │  │Outbound Tables                     │  │
│ │ │All                      │ │  │Outbound Applications               │  │
│ │ └─────────────────────────┘ │  │IVR Applications                    │  │
│ │ ┌─────────────────────────┐ │  │Agent Work Groups                   │  │
│ │ │2342 - Inbound DNIS      │ │  │Individual Agent                    │  │
│ │ │2343 - Inbound DNIS      │ │  │ ☐ 2345 - Inbound DNIS         ⌐76  │  │
│ │ │2344 - Inbound DNIS      │ │  │                                    │  │
│ │ │2345 - Inbound DNIS      │ │  │            72                      │  │
│ │ │BALANCE - IVR Application 78│                                      │  │
│ │ │CLARE - Agent Work Group │ │  │                                    │  │
│ │ │D30_HIGH - Outbound Table│ │  │                                    │  │
│ │ │D30_Low - Outbound Table │ │  │                                    │  │
│ │ │DEPOSIT - IVR Application│ │  │                                    │  │
│ │ │RECOVERY - Outbound Application│                                   │  │
│ │ │Walsh, Mike - Individual Agent│                                    │  │
│ │ └─────────────────────────┘ │  │                                    │  │
│ │ ┌────┐ ┌──────┐ ┌─────────┐ │  ┌────┐ ┌──────┐                        │
│ │ │New │ │Delete│ │Duplicate│ │  │Save│ │Cancel│                        │
│ │ └────┘ └──────┘ └─────────┘ │  └────┘ └──────┘                        │
│ └─────────────────────────────┘                                         │
└─────────────────────────────────────────────────────────────────────────┘
```

FIG. 8

80

System Name: Cedar Rapids, IA - 1 　　　　　　　　　　　　　　 ▢▣☒

Action Builder

Available Actions

Page Technical Support
Send E-Mail to Agents
Send E-Mail to Functional VP
Send E-Mail to Direct Manager
Send E_Mail to Davox
Move Agents to Gold Queue
Move Agents to Platinum Queue
Alert Managers in Work Group A
Send Quality Message to Reports
Send Supervisor Alert
We Made It - Email
Change Stat Color Purple
Print Volume Spike Report

86

New	Delete	Duplicate

Action Name and Type

Name: We Made It - Email

Type of Action: [▽]

— 82

Action Details

84

Save	Cancel

9/22

FIG. 9

90

Strategy Manager - System Name: Cedar Rapids, IA - 1   ⬚ ⬜ 🗖 ✕

Strategy Manager

Strategy Library

Tuesday Goals
Morning Goals
Evening Goals   94
Strategic Corporate Goals
Tactical Corporate Goals

New	Delete	Duplicate

Add Profile

Profile Name   Monday Goals

Description   This is the latest goals that I need to accomplish on Mondays

96

○ Queue Relationship ○ Agent Relationship ○ System Relationship

Save	Cancel

Available Goals

Current Profile

Monday Goals

All   ▽

Selected goals

Average Answer Rate
Average Speed of Answer   97—

95

99—

New	Delete

Strategy Details   —92

Select Class   Queue Strategies   ▽ Queue Relatic

| All |
| Queue Strategies |
| Agent Strategies |
| IVR Strategies |
| External Device Strategies |
| System Strategies |

Select Strategy

98

Optimization Min   ization Max

| 24 | Seconds | 82 | % | 30 | Seconds | 80 | % | 34 | Seconds | 7 |

Action Selection   Action Selection   Action Selection

☐Page Technical Support ▲	☐Page Technical Support ▲	☐Page Technical Sup
☐ Send E-Mail to Agents	☐ Send E-Mail to Agents	☐ Send E-Mail to Age
☐ Send E-Mail to Functional VP	☐ Send E-Mail to Functional VP	☐ Send E-Mail to Fun
☐ Send E-Mail to Direct Manager	☐ Send E-Mail to Direct Manager	☐ Send E-Mail to Dire
☐ Send E-Mail to Davox	☐ Send E-Mail to Davox	☐ Send E-Mail to Dav
☐ Move Agents to Gold Queue	☐ Move Agents to Gold Queue	☐ Move Agents to Gol
☐ Move Agents to Platinum Queue	☐ Move Agents to Platinum Queue	☐ Move Agents to Pla
☐ Alert Managers in Work Group A ▽	☐ Alert Managers in Work Group A ▽	☐ Alert Managers in W

Save	Cancel

FIG. 10

100

Call Center Statistics: Cedar Rapids, IA - 1 _ □ ✕

Display | Management | Preferences

104

| Relationship ▷ |
WorkGroup ▷	Tom
Task ▷	Andrew
	Michael

Queue Statistics Screen

Inbound

Current Stats View | Service Level | ▾ — 106

108

Queue	Calls in Queue		Avg Speed of Answer		Abandon Rate		Service Level		
	Current	Daily	[n] Min	Daily	[n] Min	Daily	[n] Min	Daily	▲
Customer Service	235	1,235	9 Secs	11 Secs	2.4%	5.8%	95/9	92/1	
Sales Orders	45	632	1 Secs	7 Secs	.4%	3.2%	99/1	96/	

102

109

Outbound

Current Stats View | Volumes | ▾ — 106

Campaign	Call Records	Contact Rate	Contact Rate	Agent Util	Start Time	Active Time	Calls ▲
Campaign 1	10,000	35/hr	50/hr	95%	8:35 AM	4.35 Hrs	
Campaign 2	20,000	23/hr	41/hr	93%	9:10 AM	2.78 Hrs	

102

E-Mail

Current Stats View | Results | ▾ — 106

Queue	# of E-Mails	Avg Speed of Response	# Active Agents	Avg Handle Time ▲
Technical Support	6,543	11.5/Hrs	22	9
Information Request	31,540	4.2/Hrs	12	7

102

FIG. 11

110

System Name: Cedar Rapids, IA - 1   ⊠

Queue Preferences

Display Categories

| Queue | ▽ |

Available Statistics

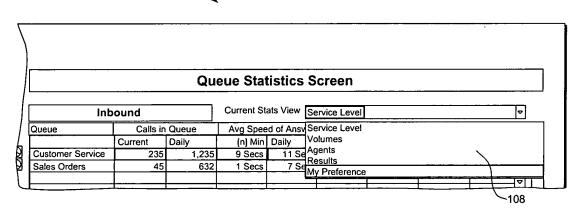| Service Level	▲
# of Calls Abandoned from Queue	
% of Calls Abandoned while Ringing	
# of calls Abandoned while Ringing	
% of calls Abandoned while Ringing	
# of Calls Abandoned while on Hold	
% of Calls Abandoned while on Hold	
# of Calls Defaulted	
% of Calls Defaulted	112
Average Speed of Answer	
Age of Oldest Call in Seconds/Minutes	
Average Time in Queue	
Total Calls	
# of Agent Transfers within Queues	
% of Agent Transfers within Queues	
# of Agents Transfers out of Queue	
% of Agents Transfers out of Queue	
# of Agents Transfers off Premise	▽

Available Statistical Display Classes

Andy
Tom
My Preference

Selected Statistical Display Classes

| My Preference |

Statistics in Order of Display

Service Level	
# of Calls in Queue	114
Average Speed of Answer	
# of Calls Abandoned from Queue	
% of Calls Abandoned while Ringing	

| New | Save | Delete | UnDo |

FIG. 12

100 —

Queue Statistics Screen

| Inbound | | | Current Stats View | Service Level | | | ▽ |

Queue	Calls in Queue		Avg Speed of Ansv	Service Level			
	Current	Daily	[n] Min	Daily	Volumes		
Customer Service	235	1,235	9 Secs	11 Se	Agents		
Sales Orders	45	632	1 Secs	7 Se	Results		
					My Preference		
							▽

—108

FIG. 13

116a

System Name: Cedar Rapids, IA - 1 Queue: Technical Support □ ▣ ☒

Current Stats View

Service Level ▽

Abandon Rate

Default Route

Service Level
Volume
Agent
IVR

Average Time in Queue

Oldest Call in Queue

Average Speed of Answer

FIG. 14

116b

System Name: Cedar Rapids, IA - 1 Queue: Technical Support

Current Stats View   [Agent]   ▼

Current Agent Status _____   Agent Averages _____

23%	10	In Wrap Mode
60%	110	In Call Mode
17%	30	In Idle Mode

Total Agents Logged In: 180

	40	In Wrap Mode
	130	In Call Mode
	70	In Idle Mode

Avg Call Handling Time: 2:10

Agent Blend Status _____

B l e n d A v a i l a b l e		L o g g e d I n
0		188

	45	24%

FIG. 15

116c →

📄 **System Name: Cedar Rapids, IA - 1 Queue: Technical Support**

Current Stats View   [Volume] ▽

┌─Transfer Rates──────────────┐   ┌─Calls in Queue────────────┐

183   0.03%   Within Queue

1002   0.22%   Out of Queue

207   77%   On Premise

8008   Not Transferred

10,000 Total Calls

58

FIG. 16

116d

| ⊟ Sales | ⊞ Inquiry | ☐ Transfer | ▨ Send Info |

FIG. 17

120

| System Name: Cedar Rapids, IA-1 | | | | | | | _ □ ✕ |

Quick View - Display Preferences

124

Agent Statistics Screen

| Call Center Agents | | Current Stats View | Time | | | ▽ |

128
129

Resource	State	Logged In	Talk	Time		
Anderson, Clare	Talk	6.5 Hrs/100%	2.0 Hrs/3	Time		
Browne, Andy	Wrap	3.0 Hrs/100%		Volume	126	
Cox, Robert	Wrap	3.0 Hrs/100%		Rate		
				Efficiency		
		122				

FIG. 18

130 —➤

System Name: Cedar Rapids, IA - 1	☒

Agent Preferences

Available Statistics

State	▲
Logged In	
Total Talk	
Total Idle	
Total After Call Work	
Total Aux Work	
% of Agent Time Working Inbound	
% of Agent Time Working Outbound	
% of Agent Time Working Email	
Outbound Talk	
Outbound Idle	
Outbound After Call Work	
Inbound Talk 132	
Inbound Idle	
Inbound After Call Work	
Email Correspondence	
Web Chat Time	
Scheduled Break 1	
Scheduled Break 2	
Scheduled Break 3	
Total Calls	
Total # Inbound Calls	▽

Available Statistical Display Classes

Andy
Tom
My Preference

Selected Statistical Display Classes

My Preference

Statistics in Order of Display

Total Calls
Total # Inbound Calls   134
Total # Outbound Calls
% of Agent Time Working Inbound

New	Save	Delete	UnDo

FIG. 19

—120

Agent Statistics Screen					
Call Center Agents		Current Stats View	Time		
Resource	State	Logged In	Talk	Time	
Anderson, Clare	Talk	6.5 Hrs/100%	2.0 Hrs/3	Time	
Browne, Andy	Wrap	3.0 Hrs/100%		Volume	126
Cox, Robert	Wrap	3.0 Hrs/100%		Rate	
				Efficiency	
				My Preference	

FIG. 20

136 —

Agent Statistics

File View Agent Window Help

Agent Status

Agents Displayed: 12   Sort by: [Average Talk Time ▾]

| CHAMBERLAIN, TOM (tom) |
| 106 |
| BLEND   01:23 |
| TEAM2 |
| DLQ_90   (COLLDEMC |

| CHEPONIS, SUE   (sue) |
| 106 |
| BLEND   01:23 |
| TEAM1 |
| REMINDER   (COLLDEMC |

| PARKER, RANDY   (randy) |
| 106 |
| BLEND   01:20 |
| TEAM2 |
| SLOW_PAY   (COLLDEMC |

| ANDERSON, CLARE (clare) |
| 105 |
| BLEND   01:19 |
| TEAM1 |
| H_INCOME   (TELDEMO) |

| WALSH, MICHAEL   (michael) |
| 103 |
| BLEND   01:09 |
| TEAM2 |
| LIST1   (TELDEMO) |

| KNOTEK, PETER   (peter) |
| 103 |
| BLEND   01:08 |
| TEAM1 |
| INBOUND   (INBOUND) |

| BROWN, ANDREW (andrew) |
| 100 |
| BLEND   01:07 |
| TEAM2 |
| SLOW_PAY   (COLLDEMC |

| CORBETT, VINCE   (vince) |
| 106 |
| BLEND   01:07 |
| TEAM2 |
| LIST3   (TELDEMO) |

| WALSH, NANCY   (nancy) |
| 96 |
| BLEND   01:06 |
| TEAM1 |
| INBOUND   (INBOUND) |

| COX, ROBERT   (robert) |
| 105 |
| BLEND   01:06 |
| TEAM2 |
| DLQ_60   (COLLDEMC |

| BOUDOUSQUIE, ALLISON (allison) |
| 103 |
| BLEND   01:05 |
| TEAM1 |
| DLQ_30   (COLLDEMC |

| ALLEN, JOE   (joe) |
| 95 |
| BLEND   01:03 |
| TEAM1 |
| INBOUND   (INBOUND) |

FIG. 21

138

Agent Statistics

Agent Statistics: ROBERT COX [robert] - T3

Name: ROBERT COX (robert)
Status: Logged On In Use [00:00]
Contacts: (00000000)

1	11	1	3	5	7	9	11
8	10	12	12	4	5	6	10

Unavailable Time
00:00:29

Talk Time

Wrap Time

Idle Time

Inbound Wrap	00:10:23	(38.1%)
Inbound Talk	00:14:21	(52.6%)
Inbound Idle	00:02:33	(9.3%)
After Call Work	00:02:33	(9.3%)
Scheduled Break	00:02:33	(9.3%)

Inbound Available Time: 00:27:17 (90.7%)

Transferred Calls

Within Queue
1.8%

Out of Queue
12.0%

On Transfer
2.73%

Not Transferred

10,000 Connects

A - ARRANGEMENT MADE	6 (35.3%)
C - REVIEW ACCOUNT	5 (29.4%)
B - BALANCE INQUIRY	3 (17.6&)
E - REFUSED TO PAY	2 (11.8%)
G - REQUEST NEW BILL	1 (5.9%)

17 Inbound Agent Inputs

Calls On Hold

On Hold
2.7%

No Hold
2.7%

10,000 Connects

FIG. 22